Green Infrastructure
Project Consideration Form

This form MUST be completed and returned electronically to the Mississippi State Department of Health, Bureau of Public Water Supply, Drinking Water Systems Improvements Revolving Loan Fund (DWSIRLF) no later than January 21, 2010 for any applicant wishing to receive principal forgiveness consideration. The DWSIRLF contacts for submittal of the above forms are listed below:

William F. Moody – Program Director – wmoody@msdh.state.ms.us
Ulysses Conley – Program Support Specialist – ulysses.conley@msdh.state.ms.us

Applicant: _____

County: _____

Project Description:

Funding Information

Total Project Cost: _____

Requested DWSIRLF Amount: _____

If the DWSIRLF loan will not fully fund the project, is the remaining funding package complete?

Yes _____ No _____

If yes, what are the other funding sources and the status of their commitments?

Funding Source	Amount	Status

Green Infrastructure Benefit of Project

If your project includes green infrastructure related components such as energy efficiency, water efficiency, green infrastructure, and environmentally innovative projects, please provide the details of the "green" components and what amount of the DWSIRLF loan requested would be to fund these "green" infrastructure components. (See attached information for definitions and qualifications.)

DWSIRLF Amount related to "green" infrastructure **$** _____

Provide detailed description of "green infrastructure":

Please provide contact information for questions relating to this form only:

Contact: _____
Address: _____
Email: _____
Telephone: _____

Please execute below acknowledging that the information provided is the most current at the time of submission:

Signed: _____
Name: _____
Title: _____

[Excerpts taken from EPA Final Guidelines on Green Infrastructure]
ATTACHMENT 8
DWSRF Project Descriptions and Examples for Green Project Reserve

The capitalization grants require that, to the extent there are eligible project applications, a State shall use 20% of its DWSRF capitalization grants for green infrastructure projects to address water and energy efficiency improvements or other environmentally innovative activities. EPA is referring to this as a Green Infrastructure Reserve within each DWSRF capitalization grants. This guidance provides clarification of this provision of the law and examples of projects that might be considered for assistance from the Green Project Reserve. As previously, mentioned MSDH and EPA anticipate that "water or energy efficiency" projects will likely be the principal focus of the Green Project Reserve under the DWSRF; however, there may also be projects, or components of projects, that qualify for consideration under the Green Infrastructure Reserve in the DWSRF on the basis of application of green infrastructure or being environmentally innovative. Under the DWSRF Green Project Reserve entire projects may be considered for inclusion or appropriate identifiable components of larger projects may be considered for inclusion. Whatever projects or project components are included, such projects or project components must clearly advance the objectives articulated in the specific categories discussed below.

Business Case Requirements for Counting Costs toward the 20% Reserve for Energy and Water Efficiency

There are some types of projects that clearly will qualify towards the 20% Green Project Reserve, being entirely and explicitly framed as a green infrastructure or a water or energy efficiency project. However, some types of traditional projects may also have benefits that may in some cases be counted towards the 20% Green Project requirement. For example, lower friction afforded by a new distribution pipe could reduce the energy needed to pump water through the distribution system. For such traditional projects (or portion of a project) to be counted towards the 20% requirement, the State's project files must contain documentation that the clear business case for the project (or portion) investment includes achievement of identifiable and substantial benefits that qualify as Green Project benefits. The required documentation could be a simple memo, but must indicate the basis on which this project was judged to qualify to be counted toward the 20% requirement. Such a memo would typically include direct reference to a preliminary engineering or other planning document that makes clear that the basis upon which the project (or portion) was undertaken included identifiable and substantial benefits qualifying for the Green Project Reserve. Although not intended to be an exhaustive list, we have identified a number of project-related costs below that could count toward the 20%. Examples that would require a business case are so noted.

I would suggest searching your proposed project from top to bottom to help establish the "green" case. Making your project or "case" qualify for "green infrastructure" will come down to two components: Technical and Financial. The technical component will involve using information from maintenance or operation records, engineering studies, project plans, etc., that identify problems at the existing facility. This information would include data on water and/or energy inefficiencies. Information gathered should clarify the technical benefits from the project in water and/or energy efficiency terms. The financial component would need to show a cost estimate and water savings from the project based on technical analysis of benefits and an assessment within total project cost that these savings comprise a substantial part of financial justification for project. This requirement of 20% of capitalization grant funds must be satisfied and it is our hope that this can be accomplished. **Systems that can supply adequate information could have the opportunity to bypass higher ranked projects if it is determined that the state must find more "green infrastructure" qualified projects.** Please contact this office if you need additional guidance.

Energy Efficiency:

I. Energy efficiency includes capital projects that reduce the energy consumption of eligible drinking water infrastructure projects
   a. Web link to EPA's Better Management-Energy page http://www.epa.gov/waterinfrastructure/bettermanagement_energy.html
   b. Web link to EPA's clean energy site http://www.epa.gov/cleanenergy/
   c. Clean energy includes wind, solar, geothermal, hydroelectric, and biogas combined heat and power systems.

II. Eligible costs associated with energy efficiency projects may include:
   a. Planning and design activities for energy efficiency that are reasonably expected to result in a capital project;
   b. Building activities that implement capital energy efficiency projects;
   c. Costs associated with a utility energy audit is required as a condition of assistance

III. Energy efficiency projects can be stand alone projects. They do not need to be part of a larger capital improvement project.

IV. Examples of projects include, but are not limited to:
   a. Energy efficient retrofits and upgrades to pumps and treatment processes (requires business case)
   b. Leak detection equipment
   c. Producing clean power for treatment systems on site (wind, solar, hydroelectric, geothermal, biogas powered combined heat and power)
   d. Replacement or rehabilitation of distribution lines (requires business case)

Water Efficiency:

I. Water efficiency is the use of improved technologies and practices to deliver equal or better services with less water.
   a. WaterSense program Focus on Utilities - http://www.epa.gov/watersense/tips/util.htm

II. Eligible costs associated with water efficiency projects may include:
   a. Planning and design activities for water efficiency that are reasonably expected to result in a capital project;
   b. Purchase of water efficient fixtures, fittings, equipment, or appliances;
   c. Purchase of leak detection devices and equipment;
   d. Purchase of water meters, meter reading equipment and systems, and pipe;
   e. Construction and installation activities that implement capital water efficiency projects;
   f. Costs associated with development of a water conservation plan, if required as a condition of DWSRF assistance.

III. Water efficiency projects can be stand alone projects. They do not need to be part of a larger capital improvement project.

IV. Examples of projects include, but are not limited to**:**
   a. Installation of water meters or automated meter reading systems
   b. Retrofit or replacement of water-using fixtures, fittings, equipment or appliances (can include rebate programs);
   c. Distribution system leak detection equipment;
   d. Replacement or rehabilitation of distribution lines (requires business case).

Green Infrastructure:

I. Definition: Green Infrastructure includes a wide array of practices that manage wet weather to maintain and restore natural hydrology by infiltrating, evapo-transpiring and capturing and using stormwater. In the context of the DWSRF, green infrastructure consists of site-specific practices, such as green roofs and porous pavement at drinking water utility facilities. In addition to managing rainfall, these green infrastructure technologies can simultaneously provide other benefits such as reducing energy demands.

a. Green infrastructure projects can be stand alone projects. They do not need to be part of a larger capital improvement project.
b. Examples of projects include, but are not limited to:
    i. Implementation of wet weather management systems for utility buildings and parking areas which include: the incremental cost of porous pavement, bio-retention, trees, green roofs, and other practices that mimic natural hydrology and reduce effective imperviousness.

Environmentally Innovative Projects:

I. Definition: Within the context of the DWSRF program, "environmentally innovative projects" would include those that are: (1) consistent with the underlying project eligibilities of the DWSRF program; and (2) are consistent with the timelines and objectives of the ARRA; and (3) that demonstrate new and/or innovative approaches to delivering service and/or managing water resources in a more sustainable way, including projects that achieve public health protection and environmental protection objectives at the least life-cycle costs,

a. Environmentally innovative projects can be stand alone projects. They do not need to be part of a larger capital improvement project. Any project which a State wishes to qualify for funding from the Green Project Reserve on the basis of being an "Environmentally Innovative Project" would require business case documentation.
b. Examples of projects include, but are not limited to:
    i. Projects, or components of projects, that enable the utility to adapt to the impacts of global climate change;
    ii. Projects, or components of projects, consistent with a "Total Water Management" planning framework; or other planning framework within which project life cycle costs (including infrastructure, energy consumption and other operational costs) are minimized.

Here are some questions that may help you put together your business case

Do RFPs & RFQs include energy reduction goals or clearly identify energy efficient pieces of equipment?

Does project include an energy audit or energy management plan?

Does project consider opportunities for water reclamation, reuse, and conservation?

Does project use lowest life cycle cost?

Does project include energy efficient retrofits and upgrades to pumps & treatment processes?
Are pumps sized properly to handle current load? Are they the most energy efficient models? Are VFDs used wherever applicable? How does plant handle increased flow or demand?

Have opportunities for energy recovery systems been considered?

Does project include green infrastructure approaches to managing stormwater and reducing energy demand on-site?

Does project consider differential uses of water based on level of treatment (e.g. non-potable uses)?

Does project utilize water efficient fixtures equipment or appliances?

Is project in accordance with an asset management plan?

Has system undertaken leak detection surveys?

What is the unaccounted water loss for the system?

Is the water system fully metered?

Does project include distribution and/or collection system repair and replacement which has documented or projected energy cost savings?

Does project evaluate opportunities to maximize green infrastructure (e.g. green roof, disconnection of downspouts)?

[**State Comment:** Please see enclose information on energy efficiency]